

STATUS OF THE CLAIMS

In the Claims:

Claim 1 (Previously presented)

1. A dispenser for controlled release of volatile substances, comprising

a reservoir that is flat and has a top face and a bottom face, and which is covered on its top face with a layer of material impermeable to the volatile substances and covered on its bottom face by a first control element, said reservoir containing at least one volatile substance,

• said first control element is composed of a material which is permeable to the at least one volatile substance, and which exerts control over the release rate of said at least one volatile substance by means of diffusion dependent on the physical properties of the at least one volatile substance and the material properties of said permeable material of the first control element, and

a second control element composed of a material which is impermeable to the at least one volatile substance, and which exerts control over the release rate of said at least one volatile substance by controlling the size of the surface of the first control element independent of the physical properties of the at least one volatile substance and the material properties of said permeable material of the first control element

wherein the second control element is in the form of a film that possesses gaps wherein the number of said gaps is from 500 to 8000 gaps per m² of said film;

and wherein said first control element is pressure-sensitively adhesive and fully covered by said second control element such that during the use of the dispenser, the at least one volatile substance moves from the reservoir first through the first control element and then through the second control element

wherein the first control element and the second control element jointly control release of

the at least one volatile substance from the reservoir .

Claims 2 and 3 (Cancelled)

Claim 4 (Previously presented)

4. The dispenser of claim 1, characterized in that reservoir is a cavity which contains the at least one volatile substance.

Claim 5 (Previously presented)

5. The dispenser of claim 1, characterized in that the reservoir comprises a carrier material which is capable of accommodating a volatile substance in the form of a solution, a suspension, a dispersion, an adsorbate or an absorbate.

Claim 6 (Previously presented)

6. The dispenser of claim 1, characterized in that the reservoir has a thickness of 0.1 mm to 2.5 cm and a length and a width between 4 mm and 20 cm.

Claim 7 (Previously presented)

7. The dispenser of claim 5, characterized in that the carrier material comprises a natural or synthetic polymer.

Claim 8 (Previously presented)

8. The dispenser of claim 5, characterized in that the carrier material is in solid matrix, fiber, textile woven, nonwoven, knitted, foam, powder, gel, solution, granule or web form.

Claim 9 (Previously presented)

9. The dispenser of claim 1, characterized in that the first control element comprises further auxiliaries selected from the group consisting of plasticizers, tackifiers, pigments, thickeners, gel formers, film formers, antioxidants and dyes.

Claim 10 (Previously presented)

10. The dispenser of claim 1, characterized in that the material which is permeable to the at least one volatile substance comprises a natural or synthetic polymer selected from the

group consisting of polysaccharides, cellulose, cellulose derivatives, cellulose esters, hemicelluloses, alginates, rayon, cellulose nitrates, acetate rayon, starch, gelatin, carrageenan, gum arabic, chitin, pectin, cellulose, viscose staple, polyacrylates, polyacrylonitrile, polybutadiene, polybutene, polycarbonate, polychlorotrifluoroethylene, polydialkylsiloxane, polyisoprene, polyethers, polyethylene, polyethylene glycol, polyethylene glycol esters, polyethylene glycol ethers, polyglycol esters, polyisobutene, polypeptides, polypropylene, polystyrene, polytetrafluoroethylene, polyurethane, polyvinyl acetate, polyvinyl alcohol, polyvinyl chloride, polyvinyl esters, polyvinyl ethers, polyvinylidene chloride, polyvinylpyrrolidone, proteins, and styrene-isoprene-styrene block copolymers and blend thereof.

Claim 11 (Previously presented)

11. The dispenser of claim 1, characterized in that the second control element is in the form of a film and has a thickness of between 50 µm and 2.5 mm.

Claim 12 (Previously presented)

12. The dispenser of claim 1, characterized in that the gaps in the second control element are tubular, spherical or irregular.

Claim 13 (Previously presented)

13. The dispenser of claim 1, characterized in that the at least one volatile substance is an active chemical and/or biological substance selected from the group consisting of disinfectants, detergives, fragrances, crop protection agents, pharmaceuticals, pheromones, cleaning agents, repellents, attractants, and detergents.

Claim 14 (Previously presented)

14. The dispenser of claim 1, characterized in that the at least one volatile substance is a fragrance or fragrance mixture with attractive or repellent action on insects, fish, amphibians, reptiles, birds or mammals.

Claims 15-17 (cancelled)

Claim 18 (Previously presented)

18. The disperser of claim 1, wherein the second control element is an open-pore foam or is a web material.

Claim 19 (Previously presented)

19. The dispenser of claim 18, wherein the second control element is an open-pore foam.

Claim 20 (Previously presented)

20. The dispenser of claim 18, wherein the web material is fiber membrane having a basis weight of 100 g/m².

Claim 21 (Previously presented)

21. The dispenser of claim 18, wherein the web material is a fiber membrane consisting of 100% viscose or 70% viscose and 30% polyethylene terephthalate.

Claim 22 (Previously presented)

22. The dispenser of claim 14, characterized in that the at least one volatile substance is a pheromone selected from the group consisting of muscalure, disparlure, bombykol, brevicomin, (E,E)-8,10-dodecadien-1-ol, (Z)-9-dodecenyl acetate, (E)-9-dodecenyl acetate, 7,11-dimethyl-3-methylene-1,6,10-dodecatriene, Z-11-hexadecenal, Z-11-hexadecenyl acetate, (Z,Z)-11,13-hexadecadienal, cis-11-tetradecenyl acetate, trans-11-tetradecenyl acetate, Z-9-tricosene, Z,E-9,12-tetradecadien-1-yl acetate, (E,Z)-2,13-octadecadienal, (E)-2-octadecenal, E(10),(Z)12-hexadecadien-1-ol, and (E)-4-tridecen-1-yl acetate.

Claim 23 (Previously presented)

23. The dispenser of claim 1, wherein the first control element is between the reservoir and the second control element is uncovered.

Claim 24 (Previously presented)

24. The dispenser of claim 22, wherein the first control element is in at least partial contact

with the layer of material impermeable to the volatile substances.